# SECTION 4.11 TRANSPORTATION AND CIRCULATION

This section discusses the traffic impacts that would occur with implementation of the proposed Project. The analysis includes a discussion of the effects of Project construction and operational traffic on area roadways. The analysis is based on the "Trinity Cannabis Cultivation & Manufacturing Facility NE Corner of West Cole Boulevard/Sunset Boulevard, City of Calexico, Draft Focused Traffic Analysis" prepared by LOS Engineering (LOS 2018). This document is provided on the attached CD of Technical Appendices as **Appendix J** of this EIR.

In order to understand the following analysis, it is important to become familiar with the concept of Level of Service (LOS) as it pertains to transportation. **Table 4.11-1** below provides the definition of each LOS found in the Highway Capacity Manual (HCM), using letters A through F, with A being the best and F being the worst. This terminology will be throughout the discussion and analysis in this section.

TABLE 4.11-1
LEVEL OF SERVICE DEFINITIONS

Level of Service	Description of Operation	Range of V/C Ratios
А	Describes primarily free-flow conditions at average travel speeds. Vehicles are seldom impeded in their ability to maneuver in the traffic stream. Delays at intersections are minimal.	0.00-0.60
В	Represents reasonably unimpeded operations at average travel speeds. The ability to maneuver in the traffic stream is slightly restricted and delays are not bothersome.	0.61-0.70
С	Represents stable operations, however, ability to change lanes and maneuver may be more restricted than LOS and longer queues are experienced at intersections.	0.71-0.80
D	Congestion occurs and a small change in volumes increases delays substantially.	0.81-0.90
E	Severe congestion occurs with extensive delays and low travel speeds occur.	0.91-1.00
F	Characterizes arterial flow at extremely low speeds and intersection congestion occurs with high delays and extensive queuing.	> 1.00

Source: City of Calexico Circulation Element Table C-1, 2015.

## 4.11.1 REGULATORY FRAMEWORK

#### A. STATE

## <u>California Department of Transportation</u>

The State of California Department of Transportation (Caltrans) is responsible for the design, construction, maintenance, and operation of the California State Highway System. Caltrans is also responsible for portions of the Interstate Highway System within the state's boundaries. Caltrans has jurisdiction over state highway right-of-way and has the authority to issue permits for work and encroachments (temporary or permanent) in these areas. Likewise, Caltrans is involved in review of traffic control plans, stoppage of traffic for placement of aerial lines, and installation or removal of

overhead conductors crossing a highway. State Route 111 (SR 111) is a Caltrans facility. The intersection of West Cole Boulevard and SR 111 was examined in the Draft Focused Traffic Analysis.

## B. LOCAL

## City of Calexico General Plan

The Circulation Element defines plans for the various methods of transportation on the City streets for automobiles, truck traffic and public transit as well as pedestrians and bicyclists. The purpose of the Circulation Element is to ensure adequate access throughout the City through the improvement and maintenance of the transportation system. Calexico's current General Plan dated February 2007 was adopted by the City on May 1, 2007.

**Table 4.11-2** analyzes the consistency of the proposed Project with the applicable goals, objectives and policies relating to land use and circulation in the City of Calexico General Plan. While this EIR analyzes the Project's consistency with the General Plan pursuant to CEQA Guidelines Section 151250, the Calexico City Council ultimately determines consistency with the General Plan.

TABLE 4.11-2
CITY OF CALEXICO GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Policies	Consistent with General Plan?	Analysis				
CIRCULATION ELEMENT	CIRCULATION ELEMENT					
II	•	rafe, efficient movement of people, goods and				
vehicles, and protect and enhance the	environmental q	uality of Calexico.				
3.6.1.1. Land Use and Circulation						
Objective 1: Land use should be planned in conjunction with the circulation so that it does not overburden the City's existing and/or planned circulation system.		The proposed Project is located in an area surrounded by roadways. As a condition for the development of Parcels 1, 2 and 3, the City will require that Sunset Boulevard be dedicated and improved to City standards including the removal of the existing barricades (Alvarado, pers. comm. 2018b). No new roadways are needed or proposed to serve the Project. The proposed Project is consistent with this objective.				
Policy 1a. The City shall establish Level of	Service "C" as th	ne minimum acceptable level.				
Policy 1b. Level of Service. No development project shall be approved that will increase the traffic on a planned or existing City street above the street's existing design capacity at Level of Service "C" without adequate mitigation.	Yes	The intersection of Enterprise Boulevard and West Cole Boulevard is not signalized but operates at LOS B and would continue to do so with the addition of Project traffic. The intersection of SR 111 and West Cole Boulevard currently operates at LOS D which is considered acceptable per Caltrans standards. The proposed Project would not worsen LOS at either intersection. Therefore, the proposed Project is consistent with this policy.				

TABLE 4.11-2
CITY OF CALEXICO GENERAL PLAN CONSISTENCY ANALYSIS

	Consistent	
General Plan Policies	with	Analysis
	General Plan?	
Policy 1d. Industrial land uses should be located and site planned to encourage the use of designated truck routes and discourage truck traffic from using non-industrial secondary, collector, and local streets.	Yes	The construction and operational traffic is anticipated to use SR 111 and West Cole Boulevard. The segment of West Cole Boulevard between Sunset Boulevard and SR 111 has a classification of Prime Arterial (4D) in the City of Calexico General Plan. This roadway is currently constructed as a 4-lane undivided (4U) roadway from Sunset Boulevard to SR 111. Products to be transported for distribution are anticipated to use Interstate 8. Non-industrial, secondary, collector and local streets would be avoided during construction and operation. Therefore, the proposed Project is consistent with this policy.
3.6.1.2 Street Network and Standards		The second control of
	ablish a system o	of street classifications and set standards for
Policy 2a. The City shall utilize Level of Service (LOS) as a measure of acceptable traffic flow and operational conditions at intersections.  Policy 2b. The City shall establish intersections	Yes	The City of Calexico General Plan Update 2015 uses a Level of Service (LOS) standard based on the <i>Highway Capacity Manual</i> (HCM) published by the Transportation Research Board National Research Council. The HCM LOS designations range from A through F where LOS A represents the best operating condition and LOS F denotes the worst operating condition. The City of Calexico's goal is that intersections and roadway segments operate at LOS C or better. In general, a location operating at LOS C or better under existing conditions that degrades to a LOS D or worse due to project traffic is considered a significant direct impact. The only exception is that an LOS D operating segment is not considered significant if the intersections along the segment operate at LOS D or better during peak periods. LOS was used to determine impacts of the proposed Project. Therefore, the proposed Project is consistent with this policy.

TABLE 4.11-2
CITY OF CALEXICO GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Policies	Consistent with General Plan?	Analysis
3.6.1.3 Access		
<b>Objective 3:</b> Access to highways, primary arterials and major arterials shall be limited to maintain capacity, efficiency and the safety of the traffic flow on the City's streets.	Yes	West Cole Boulevard between Sunset Boulevard and SR 111 is classified as a Prime Arterial. Access to this segment is limited to three points including Portico Boulevard, West Van de Graaf Avenue and Scaroni Avenue. The intersections of West Cole Boulevard and Portico Boulevard and West Cole Boulevard and West Van de Graaf Avenue are signalized. Barricades currently block access to and from Sunset Boulevard off of West Cole Boulevard. Therefore, the proposed Project is consistent with this objective.

#### 4.11.2 ENVIRONMENTAL SETTING

Information contained in this section is summarized from the "Trinity Cannabis Cultivation & Manufacturing Facility NE Corner of West Cole Boulevard/Sunset Boulevard, City of Calexico, Draft Focused Traffic Analysis" (LOS 2018). This document is provided on the attached CD of Technical Appendices as **Appendix J** of this EIR.

The analysis applies to construction and operation of the Trinity Cannabis Cultivation and Manufacturing Facility. The Project as a whole at full build-out was analyzed with no differentiation between trips associated with each of the two phases or four buildings (one existing undergoing tenant improvements [2421 Enterprise Boulevard] and three new buildings on Parcels 1, 2 and 3).

## A. EXISTING CIRCULATION NETWORK

The existing roadway system and classifications are described below. The classification is based on the City of Calexico General Plan (excerpts included in Appendix A of the Draft Focused Traffic Analysis in **Appendix J** of this EIR).

West Cole Boulevard between Sunset Boulevard and SR 111 has a classification of Prime Arterial (4D) in the City of Calexico General Plan. This roadway is currently constructed as a 4-lane undivided (4U) roadway from Sunset Boulevard to SR 111. The roadway is generally constructed with 4 travel lanes (2 lanes in each direction), a center Two-Way Left-Turn Lane (TWLTL), some on-street parking generally allowed on both sides of the roadway, and a posted speed limit of 35 MPH. A maximum roadway capacity of 25,000 was applied based on the existing configuration of a 4U roadway as outlined previously in **Table 4.11-1** (LOS 2018, p. 7). **Figure 4.11-1** depicts existing roadway conditions.

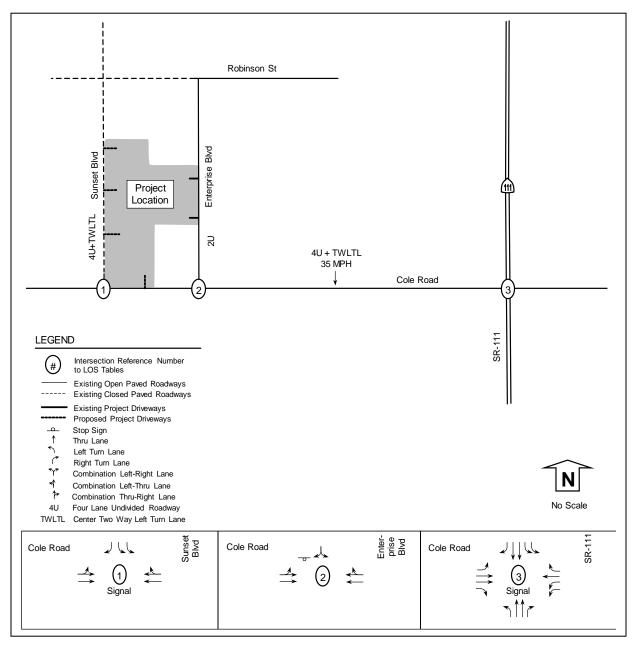


FIGURE 4.11-1 EXISTING ROADWAY CONDITIONS

## B. EXISTING TRAFFIC VOLUMES AND LOS ANALYSES

Existing peak hour intersection volumes (with count dates) were collected from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM at the following locations:

- West Cole Boulevard/Sunset Boulevard (from adjacent intersection through volumes) (Wednesday, 2/14/2018).
- 2) West Cole Boulevard/Enterprise Boulevard (Wednesday, 2/14/2018).
- 3) West Cole Boulevard/SR 111 (Wednesday, 2/14/2018).

Twenty-four hours of data were collected for the roadway segment of West Cole Boulevard between Enterprise Boulevard and SR 111.

**Figure 4.11-2** shows the existing AM, PM, and daily volumes along West Cole Boulevard. Count data are included in Appendix D of the Draft Focused Traffic Analysis in **Appendix J** of this EIR. **Table 4.11-3** summarizes intersection LOS at the three study area intersections. Intersection 1 and 2 are under the City's jurisdiction and subject to City LOS standards while intersection 3 is a Caltrans facility subject to Caltrans LOS thresholds. Under existing conditions, the study intersections (1 and 2) and roadway segment (Enterprise Boulevard to SR 111) were all calculated to operate at LOS B or better. The study intersection (3) under Caltran's jurisdiction was calculated to operate at LOS D.

TABLE 4.11-3
EXISTING INTERSECTION LOS

	Intersection and (Analysis)		Study	Existing	
			Period	Delay	LOS
1\	West Cale Boulevard at Support Poulovard (S)	All	AM	1.2	Α
1)	West Cole Boulevard at Sunset Boulevard (S)		PM	1.2	Α
21	2) West Cole Boulevard at Enterprise Boulevard (U)		AM	12.5	В
۷)			PM	12.3	В
21	3) West Cole Boulevard at SR 111 (S)		AM	45.2	D
3)			PM	44.1	D

Source: LOS 2018.

Notes: 1) Intersection Analysis – (S) Signalized, (U) Unsignalized. 2) Delay – HCM Average Control Delay in seconds. 3) LOS: Level of Service. \*Caltrans jurisdiction.

**Table 4.11-4** summarizes roadway segment LOS for the segment of West Cole Boulevard from Enterprise Boulevard to SR 111. Intersections LOS calculations are included in Appendix E of the Draft Focused Traffic Analysis in **Appendix J** of this EIR).

TABLE 4.11-4
EXISTING ROADWAY LOS

	Roadway Classification	cation Maximum Existing			
Segment	(as built)	Capacity	Daily Volume	V/C	LOS
West Cole Boulevard					
Enterprise Boulevard to SR 111	Collector (4U + TWLTL)	25,000	13,384	0.553	Α

Source: LOS 2018.

Notes: 4U + TWLTL = 4 un-divided lanes + two-way left-turn lane. Daily volume is a 24-hour volume. LOS: Level of Service. V/C: Volume to Capacity Ratio

As shown, this segment is currently operating at LOS A with adequate capacity remaining.

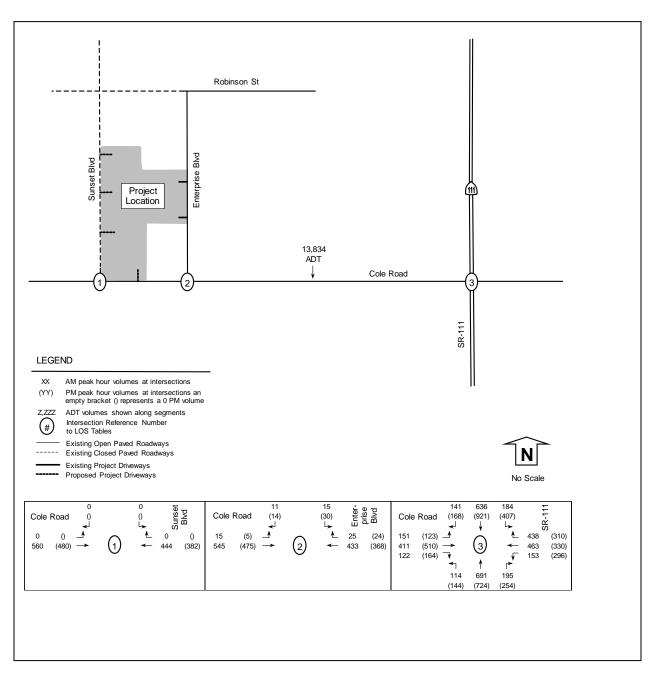


FIGURE 4.11-2 EXISTING VOLUMES

## 4.11.3 IMPACTS AND MITIGATION MEASURES

#### A. STANDARDS OF SIGNIFICANCE

The CEQA significance criteria listed below were used to determine if the proposed Project would result in impacts to transportation and circulation. These criteria are the same as the significance criteria for Transportation/Traffic listed in the CEQA Environmental Checklist, Appendix G of the 2011 CEQA Guidelines. Under CEQA, the proposed Project would have a significant impact on transportation and circulation if it would:

- a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- e) Result in inadequate emergency access.
- f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The significance criteria for potential traffic related impacts are based on criteria outlined in the Gran Plaza Phase 2 Power Center City of Calexico Final Environmental Impact Report ("Gran Plaza FEIR") (City of Calexico 2015b) with excerpts included in Appendix C of the Draft Focused Traffic Analysis in **Appendix J** of this EIR. Within the City of Calexico, the Gran Plaza FEIR states:

"The City of Calexico's goal is that intersections and roadway segments operate at LOS C or better. In general, a location operating at LOS C or better under existing conditions that degrades to a LOS D or worse due to project traffic is considered a significant direct impact. The only exception is that an LOS D operating segment is not considered significant if the intersections along the segment operate at LOS D or better during peak periods.

A cumulative impact is calculated when an intersection or segment level of service is already operating below City standards and the project increases the delay by more than 2 seconds or the volume to capacity (v/c) ratio by more than 0.02. Also, if project and cumulative project traffic together cause an intersection or segment to operate below City standards and project traffic only increases the intersection delay by more than 2 seconds or the roadway segment v/c ratio by more than 0.02, a cumulative impact would be calculated. Under the long-term scenarios, significant impacts are considered cumulative and LOS D is considered acceptable."

For roadways within Caltrans' jurisdiction, the Gran Plaza FEIR states:

"LOS D is acceptable under the Caltrans jurisdiction or as of long-term impacts."

# B. ISSUES SCOPED OUT AS PART OF THE INITIAL STUDY

Four CEQA significance criteria were scoped out as part of the Initial Study Checklist. Criterion "c" was eliminated from further analysis because the proposed Project would not result in changes to existing air traffic patterns through an increase in traffic levels or change in location. Thus, no impact is identified for this issue area.

Criterion "e" was eliminated because the Project site plan includes three driveways off of Sunset Boulevard, one off of West Cole Boulevard and two off of Enterprise Boulevard. A 30-foot access easement is also located on the western side of the parcel containing 2421 Enterprise Boulevard. The proposed Project would be reviewed by the City of Calexico Fire Department and Police Department to ensure that adequate emergency access is provided. Thus, no impact is identified for this issue area.

Lastly, Criterion "f" was eliminated because the proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Thus, no impact is identified for this issue area.

## C. METHODOLOGY

## **Study Area Criteria**

The study area was determined based on recommendations made by City of Calexico staff and identified the following intersections:

- 1) West Cole Boulevard/Sunset Boulevard
- 2) West Cole Boulevard/Enterprise Boulevard
- 3) West Cole Boulevard/SR 111

Additionally, the roadway segment of West Cole Boulevard between Enterprise Boulevard and SR 111 was included in this analysis.

#### Scenario Criteria

The number of scenarios to be analyzed was based on recommendations made by City of Calexico staff and includes two scenarios:

- 1) Existing 2018 Conditions
- 2) Existing 2018 + Project Conditions

#### **Project Trip Generation**

#### Construction

Trip generation is typically calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual 10<sup>th</sup> Edition*; however, the ITE manual does not list trip rates for cannabis cultivation. The ITE manual does include cannabis retail dispensary rates; however, the project is not a retail facility and the general public cannot purchase cannabis from this location. Excerpts from the ITE manual describing how the rate was obtained from facilities where cannabis is sold to patients or consumers is included in Appendix G of the Draft Focused Traffic Analysis in **Appendix J** of this EIR. The Project is not a retail facility; therefore, the project trip generation is calculated based on the higher amount of traffic generated between the construction of the facility and the operations of the facility (employees and truck traffic).

The project construction traffic is based on an estimate by the Applicant as to the number of construction workers and equipment are required to build the three new industrial buildings. According to the Applicant, construction is anticipated to have an average of 20 daily construction workers. The trip generation accounted for the 20 workers arriving during the same AM peak hour (even though some workers may arrive earlier or slightly later), each worker is assumed to have lunch off-site, and all workers are assumed to leave during the same PM peak hour. **Table 4.11-5** summarizes the construction workers and equipment trip generation.

TABLE 4.11-5
PROJECT CONSTRUCTION TRIP GENERATION

County stine Troffic		AM Peak Hour		PM Peak Hour	
Construction Traffic	ADT	In	Out	In	Out
Construction Workers	80	20	0	0	20
Equipment and Construction Trucks (with PCE)	8	2	2	2	2
Construction Traffic	88	22	2	2	22

Source: LOS 2018.

Notes 1) Applicant anticipated an average of 20 daily construction employees. All employees anticipated to leave for lunch, thus ADT accounts for lunch egress and ingress (20 AM in + 20 lunch out + 20 lunch in + 20 PM out = 80 ADT). 2) Passenger Car Equivalent (PCE) factor of 2 applied to each truck trip, thus 1 AM in-bound truck = 2 PCE trips. Daily truck trips anticipated at 2 over a typical day (one during each peak period), thus ADT with PCE = 8.

As shown in **Table 4.11-5**, the Project construction traffic is calculated to generate 88 daily trips, 24 AM peak hour trips (22 inbound and 2 outbound), and 24 PM peak hour trips (2 inbound and 22 outbound).

## **Operations**

The project operations traffic is based on an estimate by the Applicant of the number of employees, deliveries, product removal, sludge removal, and ancillary support vehicles. **Table 4.11-6** summarizes Project operations trip generation.

TABLE 4.11-6
PROJECT OPERATIONS TRIP GENERATION

Construction Traffic			AM Peak Hour In Out 75 0		PM Peak Hour	
		In	Out	IN	OUT	
Daily Employees	300	75	0	0	75	
Deliveries and support with Passenger Car Equivalent Factor	32	2	2	2	2	
Operations Traffic	332	77	2	2	77	

Source: LOS 2018.

Notes: 1) Daily employees of 18 on average for each of the four cultivation and manufacturing facilities plus 3 Transportation and Distribution Facility Employees. All employees anticipated to leave for lunch, thus ADT accounts for lunch egress and ingress (75 AM = 75 lunch out + 75 lunch in + 75 PM out). 2) Deliveries and support includes truck transports of product, removal of material (product and sludge), and ancillary vehicles such as postal carrier and private carriers. Passenger Car Equivalent (PCE) factor of 2 applied to each truck trip, thus 1 AM inbound truck - 2 PCD trips. Daily truck/ancillary trips are anticipated at about 1 per hour. Therefore, 8 daily inbound trucks + 8 outbound trucks = 16 trucks times a PCE factor of 2 = 32 ADT.

As shown in **Table 4.11-6**, Project operational traffic is calculated to generate 332 daily trips, 79 AM peak hour trips (77 inbound and 2 outbound), and 79 PM peak hour trips (2 inbound and 77 outbound). To be consistent, the higher operational traffic was used for this analysis.

## **Project Trip Distribution and Assignment**

**Figure 4.11-3** depicts Project distribution based on the anticipated employee labor pool and material deliveries. **Figure 4.11-4** shows Project trip assignment.

The intersection of West Cole Boulevard and Sunset Boulevard is currently signalized. However, Sunset Boulevard is closed immediately north of West Cole Boulevard. With the completion of the project, Sunset Boulevard will provide access to three of the new project driveways along Sunset Boulevard. The project trip distribution included the use of Sunset Boulevard while respecting the current eastbound to northbound left turn restriction (project traffic can travel east past Sunset Boulevard and turn left at Enterprise Boulevard as shown in **Figure 4.11-3**). The current closure and barricades on Sunset Boulevard can be moved to just past the northerly project driveway on Sunset Boulevard.

#### **Intersections**

The study intersections were analyzed based on the operational analysis outlined in the HCM. This process defines LOS in terms of average control delay per vehicle, which is measured in seconds. LOS at the intersections was calculated using the computer software program Synchro 10 (Trafficware Corporation). **Table 4.11-7** describes the HCM LOS for the range of delay by seconds for un-signalized and signalized intersections.

TABLE 4.11-7
Intersection Level of Service Definitions (HCM 2010)

Level of Service	Un-Signalized (TWSC and AWSC) Control Delay (seconds/vehicle)	Signalized Control Delay (seconds/vehicle)
Α	0-10	<u>&lt;</u> 10
В	> 10-15	> 10-20
С	> 15-25	> 20-35
D	> 25-35	> 35-55
E	> 35-50	> 55-80
F	> 50	> 80

Source: LOS 2018.

TWSC: Two Way Stop Control. AWSC: All Way Stop Control. Source: Highway Capacity Manual 2010 (exhibit 19-1 for two-way stop control, exhibit 20-2 for all way stop control, and exhibit 18-4 for signalized intersections).

According to the California Department of Transportation's (Caltrans) *Guide for the Preparation of Traffic Impact Studies,* December 2002, an accepted methodology for signalized intersections is Synchro (excerpts included in Appendix B of the Draft Focused Traffic Analysis in **Appendix J** of this EIR).

## **Roadway Segments**

The roadway segments were analyzed based on the maximum capacity of the roadway using the City of Calexico maximum capacity based on Table C-5 from the 2015 General Plan Update (City of Calexico General Plan update 2015 excerpts are included in Appendix A of the Draft Focused Traffic Analysis in **Appendix J** of this EIR). As shown in **Table 4.11-1** above, the segments operations were based on the City of Calexico LOS standards based on Table C-1 from the 2015 General Plan Update. **Table 4.11-8** summarizes the maximum roadway capacities.

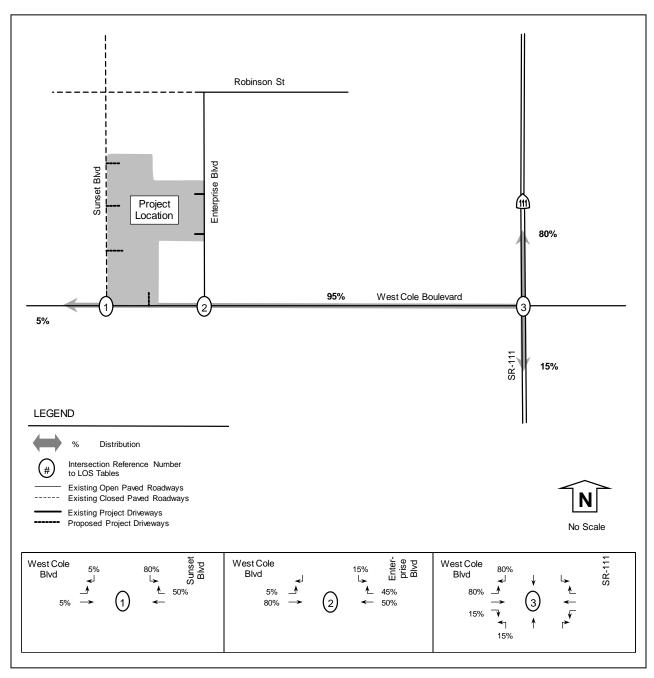


FIGURE 4.11-3
TRIP DISTRIBUTION

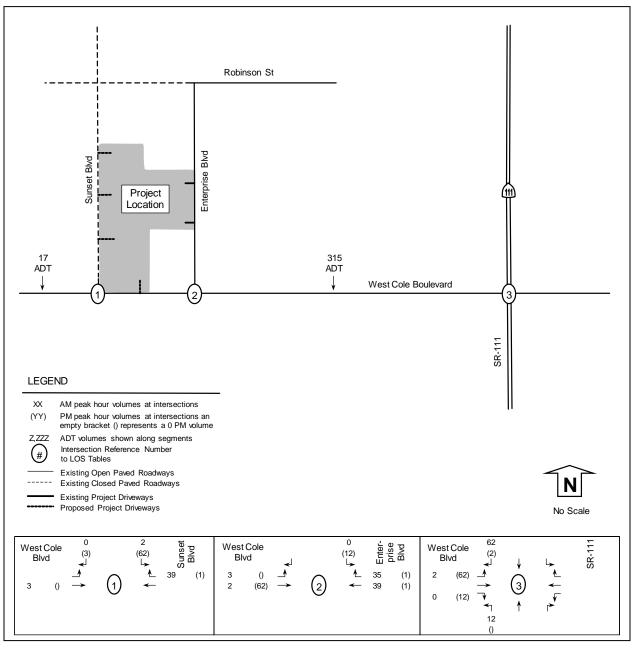


FIGURE 4.11-4
PROJECT OPERATIONAL TRAFFIC

TABLE 4.11-8
ROADWAY SEGMENT MAXIMUM CAPACITIES

Roadway Classification	Roadway Width (Feet)	Section	Right-of-Way (Feet)	Maximum Capacity*		
8-Lane Freeway	-	8F		140,000		
6-Lane Freeway	-	6F		105,000		
6-Lane Expressway	-	6E	-	90,000		
Highway	-	4D	80-148	56,300		
Highway 111	160	6D	200	60,000		
Primary	80	4D	100-126	37,500		
Major	60	4U	80-126	25,000		
Secondary	50	2U	70-75	17,500		
2-Lane Divided	50	2D	70-75	17,500		
Collector	40	2U	60	16,200		
Local	40	2U	60	12,500		

Source: City of Calexico General Plan Update 2007 Table C-D in LOS 2018. \*These roadway capacities are approximate figures only and are used at the General Plan level. They are affected by such factors as intersections (number and configuration), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, level of truck and bus traffic, and level of pedestrian and bicycle traffic. Average Daily Traffic (ADT) is used in the model application as a long-range planning tool to assist in determining roadway highway classification (number of thru lanes) needed to meet traffic demand.

#### D. PROJECT IMPACTS AND MITIGATION MEASURES

## Conflict with an Applicable Plan/Level of Service Standard (Existing Year 2018 Conditions)

Impact 4.11.1 Implementation of the proposed Project would add traffic to existing traffic volumes on West Cole Boulevard during construction and operation. The segment of West Cole Boulevard from Enterprise Boulevard to SR 111 would operate at LOS A with the addition of Project traffic. Therefore, conflicts with the General Plan Circulation Element and impacts to LOS standards would be less than significant with the addition of Project traffic.

#### Intersection LOS

**Table 4.11-9** provides a summary of the existing traffic plus Project traffic volumes for year 2018 at the three study intersections.

Table 4.11-9
Existing Without and With Project Intersection LOS

		Chudu	Existing		Existing + Project				
Intersection	Movement	Study Period	Delay	LOS	Delay	LOS	Delta	Direct Impact?	
1) West Cole Boulevard at	All	AM	1.2	Α	5.0	Α	3.8	No	
Sunset Boulevard (S)	All	PM	1.2	Α	5.2	Α	4.0	No	
2) West Cole Boulevard at	All	AM	12.5	В	13.1	В	0.6	No	
Enterprise Boulevard (U)	All	PM	12.3	В	13.0	В	0.7	No	
3) West Cole Boulevard at SR 111 (S)*	All All	AM PM	45.2 45.8	D D	45.4 46.4	D D	0.2 0.6	No No	

As shown, the three intersections would not experience any change in LOS with the addition of Project traffic. While the delays at each intersection would increase during both the AM and PM peak hours, the increase is not sufficient to result in a decline in LOS. The intersections of West Cole Boulevard and Sunset Boulevard and West Cole Boulevard and Enterprise Boulevard are under the jurisdiction of the City of Calexico and would operate at LOS B. The intersection of West Cole Boulevard and SR 111 is under the jurisdiction of Caltrans and would operate at LOS D. Therefore, **no impact** to study area intersections would occur because the addition of Project traffic does not exceed the significance thresholds of the respective jurisdictions (LOS C or better under City jurisdiction and LOS D or better under Caltrans jurisdiction).

#### **Roadway Segment**

**Table 4.11-10** provides a summary of the existing traffic plus Project traffic volumes for year 2018 along the study area roadway segment.

TABLE 4.11-10
EXISTING WITHOUT AND WITH PROJECT ROADWAY LOS

Segment (	Roadway Classifications Built		Existing				Existing + Project				
		LOS E Capacity	Peak Hour Volume	v/c	LOS	Daily Volume	Daily Volume	v/c	LOS	Change in V/C	Direct Impact?
West Cole Boulevard											
Enterprise Boulevard to SR 111 Collector	(4U+TWLTL)	25,000	13,834	0.553	Α	315	14,149	0.566	Α	0.013	No

Source: LOS 2018.

Notes: 4U+TWLTL = 4 un-divided lanes + two-way left-turn lane. Daily volume is a 24-hour volume. LOS = Level of Service. V/C = Volume to Capacity Ratio.

As shown, the segment of West Cole Boulevard from Enterprise Boulevard to SR 111 would not experience any change in LOS with the addition of Project traffic. While the additional Project traffic would slightly increase the V/C ratio by 0.013, no decline in LOS would occur. Instead the segment would continue to operate at LOS A, well above the Caltrans threshold of LOS D. Therefore, **no impact** to the study area roadway segment would occur because the addition of Project traffic does not exceed the Caltrans significance threshold.

## **Substantially Increase Hazards Due to a Design Feature**

Impact 4.11.2 The proposed Project includes the construction of a new access points off of Sunset Boulevard and West Cole Boulevard. These access points will be required to be designed per all applicable City Standards. No new access points to a Caltrans facility are proposed. Therefore, the proposed Project is not anticipated to substantially increase hazards due to a design feature and this impact is considered less than significant.

The Project parcels can be accessed off of West Cole Boulevard on the south or Robinson Boulevard to the north. The intersection of West Cole Boulevard and Sunset Boulevard is currently signalized. However, Sunset Boulevard is closed off with barricades immediately north of West Cole Boulevard. With the completion of the Project, Sunset Boulevard will provide access to three of the new Project driveways. These driveways will provide access to the three new buildings proposed along Sunset Boulevard (Buildings B, C and D). The use of Sunset Boulevard was assumed in the traffic analysis while respecting the current eastbound to northbound left-turn restriction (i.e. Project traffic can travel east past Sunset Boulevard and turn left at Enterprise Boulevard as shown in **Figure 4.11-3**) (LOS 2018, p. 12). The current closure and barricades on Sunset Boulevard can be moved to just past the northern-most

project driveway on Sunset Boulevard. One driveway will provide access to Building D off of West Cole Boulevard.

The new project driveways would require review and approval by the City of Calexico Engineering Department. The internal circulation network of the parcels and access driveways would be reviewed by the City of Calexico Public Works Department and the Calexico Fire Department to ensure the proposed Project has been designed in accordance with all applicable standards. Therefore, a **less than significant impact** would occur with regard to the proposed Project substantially increasing a hazard to a design feature.

## **Mitigation Measures**

None required.

#### **Significance After Mitigation**

Not applicable.

# 4.11.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

#### A. CUMULATIVE SETTING

The proposed Project is located in an industrial portion of the City of Calexico in the Portico Industrial Park. With the exception of the Town Center Industrial Park to the west, all of the projects identified in Table 3.0-1 in Section 3.0, Introduction to the Environmental Analysis and Assumptions Used, are located to the north and east of the Project parcels or to the south adjacent to the international border with Mexico. Traffic along West Cole Boulevard heading to and from the Town Center Industrial Park would add traffic to the same segment of West Cole Boulevard as the proposed Project.

#### B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

#### **Cumulative Conflicts to Applicable Plan/Level of Service Standard**

Impact 4.11.3 Implementation of the proposed Project, in combination with other cumulative project traffic, would add traffic to the segment West Cole Boulevard between Enterprise Boulevard and SR 111 as well as the intersections along this segment. The segment has adequate capacity remaining before it reaches LOS D and the intersections are currently above LOS C. Therefore, conflicts with the General Plan Circulation Element and impacts to LOS standards are considered less than cumulatively considerable.

## Year 2018 Plus Project Plus Cumulative

As shown in **Table 4.11-9**, the intersection of West Cole Boulevard at Sunset Boulevard, West Cole Boulevard at Enterprise and West Cole Boulevard at SR 111 all operate at acceptable levels with no impacts occurring with the addition of Project traffic. The City has a significance threshold of LOS C for intersections within its jurisdiction while facilities under the jurisdiction of Caltrans (such as SR 111) have an LOS D threshold.

The intersection of West Cole Boulevard at Sunset Boulevard is signalized and operating at LOS A with the addition of Project traffic. Based on the delay identified in **Table 4.11-9** for existing plus project condition, this intersection could have the delay increase another 15 to 30 seconds in the AM and 14.8 to 28.2 seconds in the PM before it would decline to LOS C and still be operating at an acceptable level (see **Table 4.11-7** for delay LOS delay).

The intersection of West Cole Boulevard at Enterprise Boulevard is unsignalized and operating at LOS B with the addition of project traffic. Based on the delay identified in **Table 4.11-9** for existing plus project condition, this intersection could have the delay increase another 1.9 to 11.9 seconds in the AM and 2.0

to 12.0 seconds in the PM before it would decline to LOS C and still be operating at an acceptable level (see **Table 4.11-7** for delay LOS delay). Increases beyond these would result in LOS D or E which is considered unacceptable.

The intersection of West Cole Boulevard and SR 111 is signalized and operating at LOS D with the addition of Project traffic. LOS D is an acceptable level for a Caltrans facility. Based on the delay identified in **Table 4.11-9** for existing plus project condition, this intersection could have the delay increase another 9.6 to 34.6 seconds in the AM and 8.60 to 33.6 seconds in the PM before it would decline to LOS E (see **Table 4.11-7** for delay LOS delay) which is considered unacceptable.

The segment of West Cole Boulevard from Enterprise Boulevard to SR 111 would operate at LOS A with project traffic. This segment would have a daily volume of 14,149 trips with the addition of project traffic. The capacity of this segment before it hits an unacceptable LOS E is 25,000. Given that this segment has capacity for approximately 10,000 more daily trips before it begins operating at LOS E (i.e. 25,000 trips), the Project's contribution to traffic of 315 daily trips is **less than cumulatively considerable**. Likewise, because there is still ample capacity along this segment to operate above or at Caltrans LOS D, cumulative traffic from Town Center can be accommodated. Therefore, conflicts with the General Plan Circulation Element and impacts to LOS are considered **less than cumulatively considerable**.

# **Mitigation Measures**

None required.

## **Significance After Mitigation**

Not Applicable.

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